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CLAIMS

[Claim(s)]

[Claim 1] Goods conveyance storage equipment which possesses a connection means to connect the two stanchions concerned, respectively, possible [adjustment of spacing between the pallet with which goods are laid, two or more stanchions attached in this pallet removable so that the goods laid on this pallet may be surrounded, and two stanchions which adjoin each other mutually].

[Claim 2] Goods conveyance storage equipment possessing a connection means to connect the two stanchions concerned, respectively possible [adjustment of spacing between the pallet, with which goods are laid, four stanchions which are in the condition which started almost perpendicularly to the goods installation side of this pallet, and are attached removable, and two stanchions which adjoin each other mutually and are located].

[Claim 3] Said connection means is goods conveyance storage equipment according to claim 1 or 2 constituted so that it may change at same rate, and it may interlock mutually and all spacing between two stanchions which adjoin each other mutually and are located may adjust the spacing concerned.

[Claim 4] Said connection means is goods conveyance storage equipment according to claim 1 or 2 constituted so that spacing and two stanchions between two stanchions which adjoin each other mutually and are located may be countered, and spacing between two stanchions of the others which adjoin each other mutually and are located may change at same rate, it may interlock mutually and the spacing concerned may be adjusted.

[Claim 5] In the condition of having started almost perpendicularly to the goods

installation side of the pallet with which goods are laid, and this pallet And four stanchions attached removable and the 1st and 2nd joints attached in each strut along with the longitudinal direction, respectively, Where it provided the 1st and 2nd connection members which adjoin each other mutually and connect two located stanchions mutually, respectively and four stanchions are attached in said pallet Where it was located caudad and said four stanchions are attached in said pallet rather than the 1st joint, said 2nd joint said 1st and 2nd connection members while crossing mutually, respectively and being located -- every -- the 1st connection member It connects with the 1st joint attached in one stanchion of the two stanchions with which the longitudinal direction end side adjoins each other mutually, and is located rotatable. and it connects with the 2nd joint attached in the stanchion of another side of the two stanchions with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member The longitudinal direction end side is connected with the 1st joint attached in the stanchion of said another side rotatable. and the goods conveyance storage equipment characterized by connecting the longitudinal direction other end side rotatable at the 2nd joint of attachment *** at one [said] stanchion, and attaching at least one side of said 1st and 2nd joints to the longitudinal direction movable to these attached each struts.

[Claim 6] In the condition of having started almost perpendicularly to the goods installation side of the pallet with which goods are laid, and this pallet And the 1st thru/or the 4th stanchion attached removable, and the 1st thru/or the 3rd joint attached in the 1st thru/or the 4th each strut along with the longitudinal direction, respectively, The 1st and 2nd stanchions, the 2nd and 3rd stanchions which adjoin each other mutually and are located, Where it provided the 1st and 2nd connection members which connect each of the 4th and 1st stanchions with the 3rd and 4th stanchions and a list mutually and four stanchions are attached in a pallet Where said 2nd and 3rd joints were caudad located rather than the 1st joint, and the 2nd joint was caudad located rather than the 3rd joint and said the 1st thru/or 4th stanchion is attached in said pallet said every -- the 1st and 2nd connection members, while being located in the condition of having crossed mutually, respectively Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 1st / which is located / and 2nd stanchions], and 2nd connection members It connects with the 1st joint attached in the 1st and 2nd stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 2nd joint attached in the 2nd and 1st stanchions,

respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 2nd / which is located / and 3rd stanchions], and 2nd connection members It connects with the 1st joint attached in the 2nd and 3rd stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 3rd and 2nd stanchions, respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 3rd / which is located / and 4th stanchions], and 2nd connection members It connects with the 1st joint attached in the 3rd and 4th stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 2nd joint attached in the 4th and 3rd stanchions, respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 4th / which is located / and 1st stanchions], and 2nd connection members It connects with the 1st joint attached in the 4th and 1st stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 1st and 4th stanchions, respectively rotatable, respectively. Goods conveyance storage equipment with which the 2nd and 3rd joints are characterized by the thing of said the 1st thru/or 3rd joint attached to the longitudinal direction movable to these attached each struts at least.

[Claim 7] When the 1st and 2nd connection members which adjoined each other mutually and were prepared between two located stanchions are made into a connection member pair, Goods conveyance storage equipment according to claim 5 or 6 which connected at least one side by the side of the longitudinal direction end of the 1st [which constitutes connection member at least 1 of four connection member pairs], and 2nd connection members, and the longitudinal direction other end removable to said joint.

[Claim 8] Goods conveyance storage equipment possessing the joint holddown member which carries out the fixed coupling of at least two movable joints of each other to the longitudinal direction removable to one stanchion where a stanchion is attached in a pallet according to claim 5 to 7.

[Claim 9] Goods conveyance storage equipment according to claim 8 with which said joint holddown member which carries out the fixed coupling of two or more joints attached in each of four stanchions removable, respectively is formed in the same gestalt.

[Claim 10] Goods conveyance storage equipment according to claim 8 or 9 attached

to this stanchion so that said joint holddown member may not break away to a stanchion.

[Claim 11] Goods conveyance storage equipment possessing the top plate laid removable on said stanchion according to claim 1 to 10.

[Claim 12] Said top plate is goods conveyance storage equipment according to claim 11 which has the safety catch means of the goods laid on it.

[Claim 13] Goods conveyance storage equipment according to claim 11 or 12 with which the receipt hole which contains the stanchion removed from the pallet and said connection member which constitutes the connection means or its connection means in said top plate is formed.

[Claim 14] Goods conveyance storage equipment possessing the safeguard which adjoins each other mutually and covers a part of clearance [at least] between two located stanchions according to claim 1 to 13.

[Claim 15] For the goods installation side, said pallet is goods conveyance storage equipment according to claim 1 to 14 which has the connection section by which the upper part of other goods conveyance storage equipments is connected with the opposite side removable.

[Claim 16] Goods conveyance storage equipment according to claim 1 to 15 which attached said each strut and the joint attached in this disengageable.

[Claim 17] Goods conveyance storage equipment according to claim 5 to 16 with which said connection member which connects two stanchions which adjoin mutually the stanchion attached in a pallet removable, respectively constitutes the foldable stanchion unit where this stanchion is removed from a pallet.

[Claim 18] Goods conveyance storage equipment according to claim 17 which attached the stanchion, the joint, and the connection member, respectively so that a clearance 15mm or more might be made between the connection members connected with the stanchion and this stanchion rotatable through the joint, when said stanchion unit was folded up.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the goods conveyance storage equipment used in order to carry an industrial product, its component, a building material, furniture, or other various goods or to keep this.

[0002]

[Description of the Prior Art] The equipment constituted as this kind of goods conveyance storage equipment by the pallet which lays goods, four stanchions attached in the condition of having started in the four corners of this pallet perpendicularly to that goods installation side, and the connection member which carries out the fixed coupling of between [which adjoin each other mutually] stanchions is used widely. In order to carry goods with this goods conveyance storage equipment, goods are held in the space inside four stanchions, this is laid on a pallet, and the goods are carried the whole goods conveyance storage equipment. Moreover, when keeping in a warehouse etc. the goods held in goods conveyance storage equipment, two or more goods conveyance storage equipments can be accumulated up and down, and the tooth space in a warehouse can be utilized effectively.

[0003] However, the volume of conventional goods conveyance storage equipment mentioned above of the space in which goods are held is fixed to carrying with this kind of goods conveyance storage equipment, or there being goods which should be kept from the thing of large size to the thing of small size. For this reason, although this can be carried or kept about the goods of the size corresponding to this with the goods conveyance storage equipment of a certain specific magnitude, rather than the goods hold space of that goods conveyance storage equipment, about the goods of large size, this cannot be carried or it cannot be kept. Moreover, if goods extremely smaller than goods hold space were carried with the goods conveyance storage equipment or were kept, the efficiency of materials handling will fall, moreover the tooth space in a warehouse will be used vainly, and it is not desirable.

[0004]

[Problem(s) to be Solved by the Invention] The place which this invention is made that the conventional fault mentioned above should be removed, and is made into the purpose is to offer the goods conveyance storage equipment which can carry goods efficiently or can keep this.

[0005]

[Means for Solving the Problem] This invention proposes the goods conveyance storage equipment which possesses a connection means to connect the two stanchions concerned, respectively, possible [adjustment of spacing between the pallet with which goods are laid, two or more stanchions attached in this pallet removable so that the goods laid on this pallet may be surrounded, and two stanchions which adjoin each other mutually] since the above-mentioned purpose is attained (claim 1).

[0006] Moreover, this invention proposes the goods conveyance storage equipment

possessing a connection means connect the two stanchions concerned, respectively possible [adjustment of spacing between the pallet with which goods are laid in order to attain the above-mentioned purpose, four stanchions attached are in the condition which started almost perpendicularly to the goods installation side of this pallet, and removable, and two stanchions which adjoin each other mutually and are located] (claim 2).

[0007] In that case, in above-mentioned claim 1 or goods conveyance storage equipment given in 2, said connection means is advantageous, if all spacing between two stanchions which adjoin each other mutually and are located is constituted so that it may change at same rate, and it may interlock mutually and the spacing concerned may be adjusted (claim 3).

[0008] Moreover, it is advantageous, if it is constituted so that spacing and two stanchions between two stanchions which said connection means adjoins each other mutually in above-mentioned claim 1 or goods conveyance storage equipment given in 2, and are located may be countered, and spacing between two stanchions of the others which adjoin each other mutually and are located may change at same rate, it may interlock mutually and the spacing concerned may be adjusted (claim 4).

[0009] Furthermore, this invention is in the condition which started almost perpendicularly to the goods installation side of the pallet with which goods are laid, and this pallet in order to attain the above-mentioned purpose. And four stanchions attached removable and the 1st and 2nd joints attached in each strut along with the longitudinal direction, respectively, Where it provided the 1st and 2nd connection members which adjoin each other mutually and connect two located stanchions mutually, respectively and four stanchions are attached in said pallet Where it was located caudad and said four stanchions are attached in said pallet rather than the 1st joint, said 2nd joint said 1st and 2nd connection members while crossing mutually, respectively and being located -- every -- the 1st connection member It connects with the 1st joint attached in one stanchion of the two stanchions with which the longitudinal direction end side adjoins each other mutually, and is located rotatable. and it connects with the 2nd joint attached in the stanchion of another side of the two stanchions with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member The longitudinal direction end side is connected with the 1st joint attached in the stanchion of said another side rotatable. And the longitudinal direction other end side is connected with one [said] stanchion rotatable at the 2nd joint of attachment ****, and at least one side of said 1st and 2nd joints receives these attached each struts. The goods conveyance storage equipment characterized by being attached to the longitudinal direction movable is proposed (claim 5).

[0010] Similarly, this invention is in the condition which started almost perpendicularly to the goods installation side of the pallet with which goods are laid, and this pallet in order to attain the above-mentioned purpose. And the 1st thru/or the 4th stanchion attached removable, and the 1st thru/or the 3rd joint attached in the 1st thru/or the 4th each strut along with the longitudinal direction, respectively, The 1st and 2nd stanchions, the 2nd and 3rd stanchions which adjoin each other mutually and are located, Where it provided the 1st and 2nd connection members which connect each of the 4th and 1st stanchions with the 3rd and 4th stanchions and a list mutually and four stanchions are attached in a pallet Where said 2nd and 3rd joints were caudad located rather than the 1st joint, and the 2nd joint was caudad located rather than the 3rd joint and said the 1st thru/or 4th stanchion is attached in said pallet said every -- the 1st and 2nd connection members, while being located in the condition of having crossed mutually, respectively Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 1st / which is located / and 2nd stanchions], and 2nd connection members It connects with the 1st joint attached in the 1st and 2nd stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 2nd joint attached in the 2nd and 1st stanchions, respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 2nd / which is located / and 3rd stanchions], and 2nd connection members It connects with the 1st joint attached in the 2nd and 3rd stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 3rd and 2nd stanchions, respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 3rd / which is located / and 4th stanchions], and 2nd connection members It connects with the 1st joint attached in the 3rd and 4th stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 2nd joint attached in the 4th and 3rd stanchions, respectively rotatable, respectively. Each longitudinal direction end side of the 1st [which adjoined each other mutually and was prepared between the 4th / which is located / and 1st stanchions], and 2nd connection members It connects with the 1st joint attached in the 4th and 1st stanchions, respectively rotatable, respectively. And that each longitudinal direction other end side is connected with the 3rd joint attached in the 1st and 4th stanchions, respectively rotatable, respectively. The goods conveyance storage equipment with which the 2nd and 3rd joints are characterized by the thing of said the 1st thru/or 3rd joint attached to the longitudinal direction movable to these attached each struts at least is proposed (claim 6).

[0011] Moreover, when the 1st and 2nd connection members prepared between two stanchions which adjoin each other mutually and are located in above-mentioned claim 5 or 6 in the goods conveyance storage equipment of a publication are made into a connection member pair, It is advantageous if at least one side by the side of the longitudinal direction end of the 1st [which constitutes connection member at least 1 of four connection member pairs], and 2nd connection members, and the longitudinal direction other end is connected removable to said joint (claim 7).

[0012] Furthermore, it is advantageous if the joint holddown member which carries out the fixed coupling of at least two movable joints of each other to above-mentioned claim 5 thru/or either of 7 removable to one stanchion in the goods conveyance storage equipment of a publication at the longitudinal direction where a stanchion is attached in a pallet is provided (claim 8).

[0013] Moreover, it is advantageous if said joint holddown member which carries out the fixed coupling of two or more joints attached in above-mentioned claim 8 in the goods conveyance storage equipment of a publication at each of four stanchions removable, respectively is formed in the same gestalt (claim 9).

[0014] Furthermore, in above-mentioned claim 8 or goods conveyance storage equipment given in 9, if said joint holddown member is attached to this stanchion so that it may not break away to a stanchion, it is advantageous (claim 10).

[0015] Moreover, it is advantageous if the top plate laid removable on said stanchion is provided in above-mentioned claim 1 thru/or goods conveyance storage equipment given in either of 10 (claim 11).

[0016] Furthermore, in goods conveyance storage equipment given in above-mentioned claim 11, if said top plate has the safety catch means of the goods laid on it, it is advantageous (claim 12).

[0017] Moreover, in above-mentioned claim 11 or goods conveyance storage equipment given in 12, if the receipt hole which contains the stanchion removed from the pallet and said connection member which constitutes the connection means or its connection means is formed in said top plate, it is advantageous to it (claim 13).

[0018] Furthermore, it is advantageous if the safeguard which covers a part of clearance [at least] between two stanchions which adjoin each other mutually and are located in above-mentioned claim 1 thru/or either of 13 in the goods conveyance storage equipment of a publication is provided (claim 14).

[0019] Moreover, in above-mentioned claim 1 thru/or goods conveyance storage equipment given in either of 14, the goods installation side is advantageous, if said pallet has the connection section by which the upper part of other goods conveyance storage equipments is connected with the opposite side removable (claim 15).

[0020] Furthermore, it is advantageous if the joint attached at said each strut and this in goods conveyance storage equipment given in above-mentioned claim 1 thru/or either of 15 is attached disengageable (claim 16).

[0021] Moreover, it is advantageous, if said connection member which connects two stanchions which adjoin mutually the stanchion attached in above-mentioned claim 5 thru/or either of 16 removable in the goods conveyance storage equipment of a publication at a pallet, respectively constitutes the foldable stanchion unit where this stanchion is removed from a pallet (claim 17).

[0022] Furthermore, when said stanchion unit is folded up in goods conveyance storage equipment given in above-mentioned claim 17, it is advantageous, if a stanchion, a joint, and a connection member are attached, respectively so that a clearance 15mm or more may be made between the connection members connected with the stanchion and this stanchion rotatable through the joint (claim 18).

[0023]

[Embodiment of the Invention] Hereafter, the example of an operation gestalt of this invention is explained to a detail according to a drawing.

[0024] Drawing 1 is the perspective view showing an example of the goods conveyance storage equipment concerning this invention. The goods conveyance storage equipment shown here has the pallet 2 with which the goods 1 which consist of a copying machine are laid. The pallet 2 illustrated to drawing 1 consists of the two legs 4 which consist of the deck board 3 which consists of the rectangular Taira plate, and the square bar fixed to the goods installation side 5 and inferior surface of tongue of the opposite side, and this pallet 2 is constituted by the ingredient which is the rigidity of metal plates, such as steel, wood or hard resin, etc., etc. and which becomes size. Although a deck board 3 and the leg 4 may be fixed with welding, adhesives, etc., it is also fixable with **** which is not illustrated so that these can be decomposed easily. The pallet of various gestalten other than the pallet whose flat surface gestalt is a square can also be used.

[0025] The goods 1 carried on the pallet 2 are fixed to immobilization in the condition removable on a pallet 2 by attachment-and-detachment means which are not illustrated, such as a bolt and a nut, if needed. Moreover, although the goods 1 on a pallet 2 are covered with covering 31 and he is trying to protect goods 1 with this covering 31 in the

example shown in $\frac{\text{drawing }1}{\text{drawing }1}$, this covering 31 can also be excluded.

[0026] Covering 31 makes the business as a protective cover which prevents that protect the goods 1 or a contaminant and dust adhere to goods when some goods [at least] 1 on a pallet 2 are covered and a certain object hits to goods 1. The covering 31 shown in drawing 1 consisted of the flexible bag 33 constituted with a resin sheet or resin films, such as polyethylene, and it is covered so that the goods 1 on a pallet 2 may be wrapped. The display M about goods 1 is made by covering 31. For example, although not shown in drawing like the example shown in drawing 1 besides "R" which shows the manufacture manufacture name of the goods 1, and "FT5" which shows the product name of the goods 1, notes which forbid soaking goods 1 in rain, for example, such as a display, i.e., a care mark etc., are displayed. Although this display may be entered in covering 31 the very thing, the sheet in which the display was entered may be stuck on covering 31.

[0027] Moreover, the goods conveyance storage equipment shown in drawing 1 has four stanchions 6, and as shown in drawing 2, these stanchions 6 are in the condition which started in the four corners of a pallet 2 almost perpendicularly to the goods installation side 5 of the pallet 2 concerned, and are attached removable. When a square is supposed on a pallet 2, each strut 6 is set up by each corner section of the square removable, respectively. In the illustrated example, although a stanchion 6 is constituted by a metal, resin, or wood, as each strut 6 also shows drawing 3 and drawing 4, while consisting of a metal hollow pipe, a projected part 7 is formed in the near four corners of the goods installation side 5 of a deck board 3, and the lower part of each strut 6 is attached in each of that projected part 7. Thus, each strut 6 of this example is attached so that it can detach and attach easily by manual operation to a pallet 2.

[0028] Moreover, the goods conveyance storage equipment of this example has the 1st and 2nd joints 8 and 9 attached in each strut 6 along with the longitudinal direction, respectively, and the 1st and 2nd connection members 14 and 15 which connect mutually two stanchions 6 which adjoin each other mutually and are located, respectively. every — the 1st and 2nd connection members 14 and 15 connect two stanchions 6 attached by adjoining each other mutually, respectively in each side of a pallet 2, i.e., the 1st which intersect perpendicularly mutually, and the 4th side 10, 11, 12, and 13, respectively. Moreover, it is in the condition that the 2nd joint 9 was located more nearly caudad than the 1st joint 8 where four stanchions 6 are attached in a pallet 2 so that drawing 2 may also show, and four stanchions 6 were similarly attached in the pallet 2, the connection members 14 and 15 of each other [respectively and] of the 1st and ** a 2nd are crossed, and it is located.

[0029] The 1st and 2nd joints 8 and 9 consisted of the tube-like object which fabricated a metal, synthetic resin, or rubber as shown in <u>drawing 3</u> and <u>drawing 4</u>, and each strut 6 has fitted into the feed hole 27,127. Moreover, every two tongue-shaped pieces 16 and 18 protrude on these joints 8 and 9, and each edge of the 1st and 2nd connection members 14 and 15 is connected with each of those tongue-shaped pieces 16 and 18 rotatable through pins 17 and 19, respectively. The 1st and 2nd connection members 14 and 15 consist of the rigid bodies, such as wood, rigid resin, or a metal, and are formed in thin tabular ones.

[0030] When there is the need of identifying four stanchions 6 mentioned above here As shown in drawing 1, these, respectively The 1st stanchion 6A, the 2nd stanchion 6B, 3rd stanchion 6C and 4th stanchion 6D are called, the sign of 8A, 9A;8B, and 9B;8C and 9C;8D and 9D is similarly given to each 1st and 2nd joints 8 and 9 attached in each strut 6A thru/or 6D, respectively, and these are identified. Similarly The 1st and 2nd stanchions 6A and 6B, the 2nd and 3rd stanchions 6B and 6C, The sign of 14A, 15A;14B, and 15B;14C and 15C;14D and 15D is given to the 1st and 2nd connection members which connect mutually each of the 3rd and 4th stanchions 6C and 6D and the 4th and 1st stanchions 6D and 6A, respectively, and these are identified. This presupposes that it is the same also in the example of an operation gestalt mentioned later.

[0031] To the joint, the 1st and 2nd connection members 14 and 15 are connected so that it can rotate freely as follows.

[0032] Namely, the 1st and 2nd stanchion 6A attached by adjoining each other mutually in the 1st side 10 of a pallet 2 and 1st connection member 14A prepared among 6B so that drawing 1 and drawing 2 may show It connects with 1st joint 8A by which the longitudinal direction end side was attached in 1st stanchion 6A rotatable through the above-mentioned pin, and the longitudinal direction other end side is connected with 2nd joint 9B attached in 2nd stanchion 6B rotatable through the pin. Moreover, the 1st and 2nd stanchion 6A and 2nd connection member 15A prepared among 6B are connected with 1st joint 8B by which the longitudinal direction end side was attached in 2nd stanchion 6B rotatable through a pin, and the longitudinal direction other end side is connected with 2nd joint 9A attached in 1st stanchion 6A rotatable through the pin. [0033] Moreover, 1st connection member 14B prepared between the 2nd stanchion 6B attached by adjoining each other mutually in the 2nd side 11 of the next door of the 1st side 10 of a pallet 2 and 3rd stanchion 6C The longitudinal direction end side is connected with 1st joint 8B attached in 2nd stanchion 6B rotatable through a pin. And the longitudinal direction other end side is connected with 2nd joint 9C attached in 3rd stanchion 6C rotatable through a pin. The 2nd and 3rd stanchion 6B and 2nd connection member 15B prepared between 6C It connects with 1st joint 8C by which the longitudinal direction end side was attached in 3rd stanchion 6C rotatable through a pin, and the longitudinal direction other end side is connected with 2nd joint 9B attached in 2nd stanchion 6B rotatable through the pin.

[0034] Furthermore, the 3rd attached by adjoining each other mutually in the 3rd side 12 of the next door of the 2nd side 11 of a pallet 2 and 4th stanchion 6C, and 1st connection member 14C prepared between 6D The longitudinal direction end side is connected with 1st joint 8C attached in 3rd stanchion 6C rotatable through a pin. And the longitudinal direction other end side is connected with 2nd joint 9D attached in 4th stanchion 6D rotatable through a pin. The 3rd and 4th stanchion 6C, and 2nd connection member 15C prepared between 6D It connects with 1st joint 8D by which the longitudinal direction end side was attached in 4th stanchion 6D rotatable through a pin, and the longitudinal direction other end side is connected with 2nd joint 9C attached in 3rd stanchion 6C rotatable through the pin.

[0035] Similarly the 4th attached by adjoining each other mutually in the 4th side 13 of the next door of said 3rd side 12 of a pallet 2 and 1st stanchion 6D, and 1st connection member 14D prepared among 6A The longitudinal direction end side is connected with 1st joint 8D attached in 4th stanchion 6D rotatable through a pin. And the longitudinal direction other end side is connected with 2nd joint 9A attached in 1st stanchion 6A rotatable through a pin. The 4th and 1st stanchion 6D, and 2nd connection member 15D prepared among 6A It connects with 1st joint 8A by which the longitudinal direction end side was attached in 1st stanchion 6A rotatable through a pin, and the longitudinal direction other end side is connected with 2nd joint 9D attached in 4th stanchion 6D rotatable through the pin.

[0036] As mentioned above, it sets to the goods conveyance storage equipment shown in drawing 1 thru/or drawing 4. The 1st connection member 14 is connected with the 1st joint 8 attached in one stanchion 6 of the two stanchions 6 with which the longitudinal direction end side adjoins each other mutually, and is located in each sides 10, 11, 12, and 13 of a pallet 2 rotatable. every -- and it connects with the 2nd joint 9 attached in the stanchion 6 of another side of the two stanchions 6 with which the longitudinal direction other end side adjoins each other mutually, and is located rotatable -- having -- every -- the 2nd connection member 15 the longitudinal direction end side is connected with the 1st joint 8 attached in the stanchion 6 of above-mentioned another side rotatable, and the longitudinal direction other end side is connected with one above-mentioned stanchion 6 rotatable at the 2nd joint 9 of attachment ****. Thus, each strut 6 achieves the function as a stanchion supporting the 1st and 2nd connection

members 14 and 15.

[0037] Moreover, the 1st and 2nd joints 8 and 9 connected with each of the 1st and 2nd connection members 14 and 15 like **** are attached movable so that at least one of these can move to the longitudinal direction freely to these attached each struts 6. In the illustrated example, each 2nd joint 9 is located in the lower part of each strut 6, as shown in drawing 4, it ****s, it was fixed to each strut 6 by 20 or welding, respectively, and, moreover, each 1st joint 8 has fitted into the longitudinal direction free [sliding] to each strut 6 by it. The 1st joint 8 may be fixed to a stanchion 6, and the 2nd joint 9 may be fitted in free [sliding] to a stanchion 6, or you may fit in the 1st and 2nd joints 8 and 9 free [sliding] to both the stanchions 6.

[0038] The thing of the various sizes corresponding to the magnitude of the goods 1 which should carry the pallet 2 shown in drawing 1 is prepared beforehand. When carrying goods 1, the pallet 2 suitable for the magnitude of the goods 1 is chosen, goods 1 are carried on the goods installation side 5 of the top face, the goods 1 are fixed to a pallet 2 with a bolt etc. if needed, and, moreover, the goods 1 are covered with covering 31 if needed. Although the spacing D1 and D2 between that projected part 7 differs according to the size of the selected pallet 2 at this time, spacing between the stanchions 6 before attaching in a pallet 2 can be freely adjusted as follows so that it may agree at those spacing D1 and D2.

[0039] Namely, if it presses to the sense estranged mutually as 6C and 6D are indicated to be two stanchions 6A and 6B in the stanchion 6 before attaching in a pallet 2 which adjoin each other mutually to <u>drawing 1</u> by the arrow head A Each 1st joint 8 slides caudad to each strut 6, and spacing between the 1st and 2nd stanchions 6A and 6B and spacing between the 3rd and 4th stanchions 6C and 6D can extend. At this time, as an arrow head B shows the 1st and 4th stanchions 6A and 6D and the 2nd and 3rd stanchions 6B and 6C to coincidence, it moves to the sense estranged mutually, and spacing between these stanchions can also be extended.

[0040] On the contrary, if each strut 6 is pressurized at an arrow-heads A and B and opposite side, since each 1st joint 8 will move up along with a stanchion 6, spacing between the stanchions which adjoin each other mutually is narrowed. Thus, in the example shown in <u>drawing 1</u>, each of that spacing interlocks mutually and is adjusted so that spacing between two stanchions attached by adjoining each other mutually each sides 10, 11, 12, and 13 of a pallet 2 may change at same rate.

[0041] After adjusting spacing between the adjacent each struts 6 according to the spacing D1 and D2 between the projected parts 7 of the pallet 2 chosen as mentioned above, the lower part of each strut 6 is attached in each projected part 7 of the pallet 2

with which goods 1 were laid. Each strut 6 may be attached in a pallet 2 removable like the example which may constitute so that four stanchions 6 may be attached in the four corners of a pallet 2 removable, and is later explained with reference to drawing 7 by attaching in each projected part 7 the feed hole of each 2nd joint 9 fixed to the lower part of each strut 6 in that case.

[0042] As mentioned above, the stanchion 6 which adjusted spacing to any of the pallet 2 can be attached by preparing two or more pallets 2 with which the spacing D1 and D2 between projected parts 7 differs.

[0043] moreover, although you may change the 1st and 2nd connection members 14 and 15 into a free condition, without connecting mutually, in the illustrated example The pars intermedia of the 1st [which made the pair mutually], and 2nd connection members 14 and 15 by the ** pin 21 When it is connected so that it can rotate freely mutually, and this adjusts spacing between each struts 6, the 1st and 2nd connection members 14 and 15 can be operated smoothly, and spacing tuning between each struts can be performed smoothly. This is the same also in the example of an operation gestalt explained later.

[0044] Although spacing tuning between the stanchions which mentioned above the 1st and 2nd joints 8 and 9 even if it fitted into the longitudinal direction possible [sliding] to both each struts 6 can be performed If the 2nd joint 9 is fixed to a stanchion 6 like the example shown in one of the joints, for example, drawing 1, and the joint 8 of another side is attached possible [sliding] to a stanchion 6 The 1st and 2nd connection members 14 and 15 can be smoothly operated at the time of the spacing tuning between stanchions, and it becomes possible to do the activity comfortably.

[0045] By attaching a stanchion 6 to a pallet 2 as mentioned above, the goods conveyance storage equipment 30 assembled as shown in drawing 2 can be constituted. At this time, the goods 1 (not shown in drawing 2) carried on the goods installation side 5 are held in the hold space surrounded by four stanchions 6 and the 1st and 2nd connection members 14 and 15. The fork of the fork lift truck which is in this condition, for example, is not illustrated is inserted in the pallet 2 bottom, by raising a fork, goods conveyance storage equipment 30 is lifted and goods 1 can be carried. Moreover, goods [having carried goods 1] conveyance storage equipment can be moved to a truck, a vessel, or a railroad vehicle, and this can be conveyed. Moreover, the goods 1 held in goods conveyance storage equipment 30 can also be kept in a warehouse etc. Thus, since goods 1 are enclosed by the 1st and 2nd connection members 14 and 15 in the four way type when carrying goods 1 or keeping this, the goods 1 can be protected.

[0046] On the other hand, the pallet 2 has the connection section by which the upper

part of other goods conveyance storage equipments is connected with the rear-face side of the opposite side removable in the goods installation side 5, and the connection section which changes from the engagement hole 22 to four places of each leg 4 of a pallet 2 is formed in the example shown in $\underline{\text{drawing 1}}$.

[0047] By this configuration, as shown in $\frac{\text{drawing }2}{\text{drawing }2}$, the goods conveyance storage equipment carrying goods (not shown in drawing 2) can be accumulated, where more than one are stabilized up and down. That is, as shown in drawing 1, the goods conveyance storage equipment 30 is laid in a warehouse, as it fits in possible [desorption] and the cap 23 with which the tip sharpened is shown in the upper part of each strut 6 of goods conveyance storage equipment at $\underline{\text{drawing }2}$. And other goods conveyance storage equipment 30A constituted completely as well as the goods conveyance storage equipment 30 concerned is raised and laid above the goods conveyance storage equipment 30 by the fork lift truck. At this time, the cap 23 ($\underline{\text{drawing }1}$) attached in the upper part of four stanchions 6 of downward goods conveyance storage equipment 30 is attached in the engagement hole 22 ($\frac{drawing 1}{drawing 1}$) formed in the pallet of upper goods conveyance storage equipment 30A, respectively. Thereby, two or more goods conveyance storage equipments 30 and 30A can be positioned up and down, and each other can be accumulated, and goods 1 can be kept, using the tooth space in a warehouse effectively. Moreover, where two or more goods conveyance storage equipments are piled up up and down, these are also carriable together.

[0048] The cap 23 attached in the upper part of each strut 6 may not be carried out that it is easy to make each strut 6 engage with the engagement hole 22, and without using this cap 23, soon, the tip of each strut 6 may be constituted so that it may engage with the engagement hole 22. Each strut 6 can be made to engage with the engagement hole 22 easily by forming the tip of each strut 6 in a tapered form like cap 23 in that case.

[0049] Moreover, if each strut 6 is brought close to the sense which approaches mutually, the 1st and 2nd connection members 14 and 15 will be folded, these whole can be folded up in a compact, as shown in <u>drawing 5</u>, at the time of un-using [of goods conveyance storage equipment] it, four stanchions 6 can be sampled from the pallet 2, and this can be stored in a very small tooth space. Thus, a stanchion 6 and the connection members 14 and 15 constitute the foldable stanchion unit 32.

[0050] On the other hand, the pallet 2 which had the stanchion 6 removed is storable in piles up and down, as shown in <u>drawing 6</u>. At this time, by engaging with the engagement hole 22 (<u>drawing 1</u>) of that upper pallet 2 the projected part 7 which protruded on the goods installation side 5 of a pallet 2, respectively, correctly, each

pallet 2 can be positioned up and down, and can be accumulated. thus, the stanchion unit 32 and a pallet 2 can be used repeatedly, and it must discard at a conveyance place like the goods conveyance storage equipment which consists of conventional corrugated paper etc. -- a thing can be lost or it can lessen.

[0051] As mentioned above, according to the goods conveyance storage equipment shown in <u>drawing 1</u> thru/or <u>drawing 6</u>, it carries, or substantially [the magnitude of the goods 1 which should be kept], when choose the pallet 2 according to this at any times, they are made to correspond to the spacing D1 and D2 of the projected part 7 and adjust spacing of a stanchion 6, the goods can be carried easily or it can be kept.

[0052] The goods conveyance storage equipment of the example of an operation gestalt shown in drawing 7 thru/or drawing 10 also has the 1st thru/or the 4th stanchion 6A, 6B, 6C, and 6D ($\underline{\text{drawing 7}}$) which is in the condition which started in the four corners of the pallet 2 with which the goods 1 (refer to drawing 9 and drawing 10), such as a copying machine, are laid, and its pallet 2 almost perpendicularly to the goods installation side 5 of the pallet 2 concerned, and is attached removable. That is, when a square is supposed on a pallet 2, each strut 6 is set up by each corner section of the square removable, respectively. Although it can also attach in a pallet 2 removable by the approach which explained the lower part of that each strut 6 previously in relation to $\underline{\text{drawing }1}$ also in this case By drilling a mounting hole 24 in the four corners of the goods installation side 5 of a pallet 2, and inserting the cap 25 which attached the lower part of each strut 6 in these at direct or its lower part in the example shown in drawing 7 It is constituted so that each strut 6 can be easily attached or demounted on a pallet 2 by manual operation. Moreover, as for the pallet 2 shown in drawing 7, the three legs 4, 4, and 4A are being fixed to the inferior surface of tongue of a deck board 3. There is no change as substantially as the pallet 2 which showed other configurations of a pallet 2 to drawing 1.

[0053] In the example shown in <u>drawing 7</u>, the 3rd joint 26 other than the 1st and 2nd joints 8 and 9 is attached in each strut 6. Also about this 3rd joint 26, Signs 26A, 26B, 26C, and 26D are attached to each joint of that, and that each is identified.

[0054] As mentioned above, the goods conveyance storage equipment shown in drawing 7 When it has the 1st thru/or the 3rd joint 8, 9, and 26 attached in the 1st 4th each strut 6A thru/or 6D along with the longitudinal direction, respectively and a stanchion 6 is moreover attached in a pallet 2 like the goods conveyance storage equipment of drawing 1, The 1st and 2nd stanchions 6A and 6B which adjoin each other mutually and are located in each side 10 of the pallet 2 thru/or 13, The 1st and 2nd connection members 14 and 15 which connect mutually each of the 4th and 1st stanchions 6D and 6A with

the 2nd and 3rd stanchions 6B and 6C, the 3rd and 4th stanchions 6C and 6D, and a list are provided.

[0055] Where four stanchions 6 are attached in a pallet 2, moreover, the 2nd and 3rd joints 9 and 26 the condition that it was caudad located rather than the 1st joint 8, and the 2nd joint 9 was caudad located rather than the 3rd joint 26, and the 1st 4th stanchion 6A thru/or 6D were attached in the pallet 2 -- it is -- every -- the 1st and 2nd connection members 14 and 15 are located in the condition of having crossed mutually, respectively.

[0056] furthermore, every -- like the case where it is shown in $\frac{\text{drawing }3}{\text{drawing }4}$, longitudinal direction each edge of the 1st and the 2nd connection member 14 and 15 is connected so that it can rotate freely as follows to each joint through a pin.

[0057] Where the 1st 4th stanchion 6A thru/or 6D are attached in a pallet 2 In the 1st side 10 of a pallet 2, adjoin each other mutually, and each longitudinal direction end side of the 1st [which was prepared between the 1st and 2nd located stanchion 6A and 6B] and 2nd connection members 14A and 15A It connects with the 1st joint 8A and 8B attached in the 1st and 2nd stanchions 6A and 6B, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 2nd joint 9B and 9A attached in the 2nd and 1st stanchions 6B and 6A, respectively rotatable, respectively.

[0058] Similarly, in the 2nd side 11 of the next door of the 1st side 10 of a pallet 2, adjoin each other mutually, and each longitudinal direction end side of the 1st [which was prepared between the 2nd and 3rd located stanchion 6B and 6C] and 2nd connection members 14B and 15B It connects with the 1st joint 8B and 8C attached in the 2nd and 3rd stanchions 6B and 6C, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 3rd joint 26C and 26B attached in the 3rd and 2nd stanchions 6C and 6B, respectively rotatable, respectively. [0059] In the 3rd side 12 of the next door of the 2nd side 11 of a pallet 2, adjoin each other mutually, and furthermore, each longitudinal direction end side of the 1st [which was prepared between the 3rd located and 4th stanchion 6C, and 6D] and 2nd connection members 14C and 15C It connects with the 1st joint 8C and 8D attached in the 3rd and 4th stanchions 6C and 6D, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 2nd joint 9D and 9C attached in the 4th and 3rd stanchions 6D and 6C, respectively rotatable, respectively. [0060] In the 4th side 13 of the next door of the 3rd side 12 of a pallet 2, adjoin each other mutually, and moreover, each longitudinal direction end side of the 1st [which was prepared between the 4th located and 1st stanchion 6D, and 6A] and 2nd connection members 14D and 15D It connects with the 1st joint 8D and 8A attached in the 4th and 1st stanchions 6D and 6A, respectively rotatable, respectively, and that each longitudinal direction other end side is connected with the 3rd joint 26A and 26D attached in the 1st and 4th stanchions 6A and 6D, respectively rotatable, respectively. [0061] Although the joint per piece is connected with each edge side of the 1st and 2nd connection members 14 and 15 like ****, respectively Inside it is the 1st thru/or the 3rd joint 8, 9, and 26 connected with each of the 1st and 2nd connection members 14 and 15, the 2nd and 3rd joints 9 and 26 are attached movable to these attached each struts 6 at least so that it can move to the longitudinal direction freely. In the illustrated example, each 1st joint 8 located in the upper part of each strut 6 pressed fit or ****ed to each strut 6, for example, or was fixed to it by welding etc., and the 2nd and 3rd joints 9 and 26 have fitted into the longitudinal direction free [sliding] to a stanchion 6. You may make it also attach the 1st joint 8 in the longitudinal direction free [sliding] to each strut 6 in which this was attached.

[0062] Also when carrying goods with the goods conveyance storage equipment shown in drawing 7, as the pallet 2 suitable for the magnitude of the goods is chosen and it is shown in drawing 9 and drawing 10, goods 1 are laid on the pallet 2, and the goods 1 are fixed to a pallet 2 removable if needed, and the goods are covered with covering 31 if needed. Spacing between each struts 6 before attaching in a pallet 2 is adjusted so that the spacing D1 and D2 between the mounting holes 24 of the selected pallet 2 may be suited on the other hand.

[0063] Namely, it presses in the direction which shows the 1st and 2nd two stanchions 6A and 6B attached in each of the 1st side 10 of a pallet 2, and the 3rd side 12 which counters this by adjoining each other mutually, and two stanchions, the 3rd and the 4th, 6C and 6D to drawing 7 by the arrow head A, or the direction contrary to this. Then, the 2nd joint 9 attached in these stanchions slides on the upper part or a lower part along with each strut 6. Spacing between two stanchions, the 1st and the 2nd, 6A and 6B, and other 3rd [the] and spacing between the 4th two stanchions 6C and 6D change with these at same rate. In this example, 2nd stanchion 6B, spacing of 3rd stanchion 6C, and 4th stanchion 6D and spacing of 1st stanchion 6A do not change only by adjusting spacing of stanchion 6A, 6B;6C, and 6D in that case.

[0064] When adjusting these spacing, it presses in the direction which shows the 2nd and 3rd stanchions 6B and 6C and the 4th and 1st stanchions 6D and 6A to drawing 7 by the arrow head B, or the direction contrary to this. The 3rd joint 26 which fitted into each strut moves to the upper and lower sides or a lower part along with each strut 6, and spacing between the 2nd and 3rd stanchions 6B and 6C and spacing between the

4th and 1st stanchions 6D and 6A change with these at same rate. Thus, it sets to the goods conveyance storage equipment of this example. So that spacing between two stanchions attached in each of one side which counters one side and this of a pallet 2 by adjoining each other may change at same rate The spacing interlocks mutually and is adjusted, and the spacing interlocks mutually and is adjusted so that spacing between two stanchions attached in other each of two sides which a pallet 2 moreover counters mutually by adjoining each other mutually may change at same rate. For this reason, it can adjust much more more freely than the case of the example which showed adjustment of spacing between each struts to drawing 1.

[0065] Thus, the stanchion 6 after spacing adjustment can be attached in any of the pallet 2 by preparing beforehand the pallet 2 which has the spacing D1 and D2 between the mounting holes 24 in which the stanchion 6 with which spacing is adjusted can be attached.

[0066] The goods carried on the goods installation side 5 of a pallet 2 are carriable completely like the case of the example of an operation gestalt explained previously as mentioned above. Also on the pallet 2 shown in <u>drawing 7</u>, it has the connection section to which the upper part of four stanchions of other goods conveyance storage equipments changes from four engagement holes 22 connected removable in the goods installation side 5 at the rear-face side of the opposite side. Moreover, by this The assembled goods conveyance storage equipment can be accumulated up and down like the place shown in <u>drawing 2</u>, and goods can be kept to a small tooth space (refer to drawing 12).

[0067] And if the stanchion 6 shown in <u>drawing 7</u> is extracted from a pallet 2, the stanchion 6, 1st, and 2nd connection members 14 and 15 are folded up in a compact, as shown in <u>drawing 8</u>, and a pallet 2 can be accumulated up and down and can be stored. Thus, four stanchions 6 and the connection members 14 and 15 connected with each strut through joints 8, 9, and 26 constitute foldable stanchion unit 32A, where the stanchion 6 is removed from a pallet 2.

[0068] While drawing 9 carries goods 1 on a pallet 2 and fixing the goods 1 to a pallet 2 removable Cover goods 1 with covering 31, and lower stanchion unit 32A subsequently to drawing 7 shown from the upper part of a pallet 2, and a stanchion 6 is attached in a pallet 2. Or the situation when raising that stanchion unit 32A up, and removing from a pallet 2 is shown, and the goods conveyance storage equipment shown in drawing 1 thru/or drawing 6 can also be used by this approach.

[0069] According to the operation mentioned above, the stanchion units 32 and 32A must be lowered caudad, or this must be raised up, and this activity will become a little

complicated. On the other hand, drawing 10 makes the 3rd joint 26 of stanchion unit 32A shown in drawing 7 slide up. The 1st and the 2nd connection member 14B and 15B, The 1st and 2nd connection members 14D and 15D which counter this are raised up. Other 1st [the], and the 2nd connection member 14A and 15A and each of 14C and 15C are folded up, the stanchion unit 32A is moved horizontally, and the operation which attaches or demounts this stanchion unit 32A on a pallet 2 is shown. Since it is not necessary to move stanchion unit 32A up and down, and according to this approach that activity can be done very comfortably, a stanchion 6 is moreover greatly separated from goods 1 and that stanchion unit 32A is moved horizontally Anchoring and removal of stanchion unit 32A to a pallet 2 can be performed, and an activity can be carried out, without attaching a blemish to goods 1, without contacting a stanchion 6 and the 1st and 2nd connection members 14 and 15 on goods.

[0070] Moreover, <u>drawing 11</u> attaches a stanchion 6 in a pallet 2 first, sets stanchion unit 32A to a pallet 2, and shows the operation which carries goods 1 on a pallet 2 after that. Each longitudinal direction other end, i.e., the lower limit, side of the 1st and 2nd connection members 14A and 15A shown here is connected with each 2nd joint 9B and 9A removable, respectively, and can secede also from a pin 21.

[0071] When stanchion unit 32A shown in drawing 11 is set to a pallet 2, as all the 1st and 2nd connection members 14 and 15 showed drawing 7, it connects with each joint through the pin, respectively, and goods 1 are not carried on the pallet 2 at this time. Next, the pin 21 which has connected the connection members 14A and 15A which counter the goods 1 out of a pallet 2 is removed, and the longitudinal direction other end, i.e., lower limit, side is removed from each 2nd joint 9B and 9A. It secedes from the pin which connects the lower limit and joint of each connection member, and these are removed. The 1st and 2nd connection members 14A and 15A which suited by this the condition which showed in drawing 11 with the broken line till then are rotated in the direction of an arrow head focusing on that each longitudinal direction end, i.e., each of that upper limit, side, and these connection members 14A and 15A hang down, as a continuous line shows. Thus, since between 1st stanchion 6A and 2nd stanchion 6B is opened wide, through here, goods 1 are carried on a pallet 2, and this is loaded on a pallet 2 at drawing 11, as a broken line shows. Subsequently, while making drawing 11 rotate the 1st and 2nd connection members 14A and 15A as a broken line shows and connecting these by the pin 21, that each longitudinal direction other end side is connected with the 2nd joint 9B and 9A by the pin, respectively.

[0072] According to the above-mentioned approach, without raising stanchion unit 32A, goods 1 are carried on a pallet 2, or this is taken down and the thing of it can be carried

out.

[0073] In the example shown in $\frac{drawing 11}{drawing 11}$, although each longitudinal direction other end side of the 1st and 2nd connection members 14A and 15A was connected with the 2nd joint 9B and 9A removable, that each longitudinal direction end side may be connected with each 1st joint 8A and 8B removable. Or a longitudinal direction end [of the 1st and 2nd connection members 14A and 15A] and other end side may be connected with both the joints 8A, 8B, 9B, and 9A removable. If the 1st [which is constructed one at least] and 2nd connection members are constituted as mentioned above, goods 1 can be discharged [furthermore,] and shipped on a pallet by the above-mentioned approach. Namely, if two connection members, the 1st and the 2nd, which adjoined each other mutually and were prepared between two located stanchions will be called a connection member pair At least one side by the side of the longitudinal direction end of 1st [which stanchion unit 32A has four connection member pairs, and constitutes at least one of connection member pairs / them], and 2nd connection member 14A, 15A;14B, and 15B;14C, and 15C;14D, and 15D, and the longitudinal direction other end It connects removable to each of the joint. This configuration is applicable also to the goods conveyance storage equipment which has the stanchion unit 32 shown in <u>drawing 1</u> as it is.

[0074] In addition, the bridge formation member 34 is attached in 1st stanchion 6A of stanchion unit 32A and the upper part of 4th stanchion 6D which were shown in drawing 11, and 2nd stanchion 6B and the upper part of 3rd stanchion 6C removable. These bridge formation members 34 are members which prevent that the stanchion 6 is unsteady and are prepared if needed, also when the upper part of two stanchions is connected mutually and external force is applied to each strut 6 from a longitudinal direction. When adjusting spacing between each struts as mentioned above or folding up stanchion unit 32A, the bridge formation member 34 is demounted from a stanchion. [0075] Moreover, the difference is not essential although the structure of the pallet 2 shown in drawing 11 is somewhat different from the pallet shown in drawing 7 . That is, the pallet 2 shown in drawing 12 also has the two legs 4, a deck board 3 is fixed on it, and goods are put on the goods installation side 5 of the top face. Moreover, although the engagement section 39 which consists of the slot of reverse V typefaces is formed in the bottom side of each leg 4 shown in $\underline{ ext{drawing }11}$, this engagement section 39 engages with the bridge formation member 34 of the goods conveyance storage equipment located in the bottom, when goods conveyance storage equipment is accumulated up and down. Drawing 12 shows the situation at this time. Thus, the engagement section 39 constitutes the connection section with which the upper part of the goods conveyance storage equipment of the goods conveyance storage equipment bottom is connected removable from an example shown in $\underline{\text{drawing }11}$ and $\underline{\text{drawing }12}$.

[0076] By the way, although it can be freely slid on the 2nd and 3rd joints 9 and 26 of the goods conveyance storage equipment shown in drawing 7 to the stanchion 6 with which these were attached, after they set stanchion unit 32A to a pallet 2, they may fix these joints 9 and 26 to a stanchion 6 according to **** etc. This is the same also about the 1st joint 8 shown in drawing 1. If it does in this way, the rigidity of the stanchion units 32 and 32A attached to the pallet 2 can be raised, and goods 1 can be supported firmly.

[0077] However, although outside **** is applied to the goods conveyance storage equipment when a truck etc. conveys the goods conveyance storage equipment where goods conveyance storage equipment is accumulated up and down If the 2nd and 3rd joints 9 and 26 which can slide are not fixed to a stanchion to a stanchion 6 but the fixed coupling of the 2nd and 3rd joints 9 and 26 of each other is moreover carried out in that case It is clear that vibration of goods conveyance storage equipment is absorbed effectively, it suppresses that vibration of lower goods conveyance storage equipment gets across to upper goods conveyance storage equipment, and the stability of the accumulated whole goods conveyance storage equipment can be raised as a result of an experiment.

[0078] After adjusting spacing between the stanchions of stanchion unit 32A shown in drawing 7 in the example of an operation gestalt shown in drawing 13 thru/or drawing 15 from such a viewpoint (for example, after setting the stanchion unit 32A to a pallet 2), it is constituted so that the joint holddown member 35 may be fixed to the 2nd joint 9 and 3rd joint 26 which were attached in each strut 6 removable according to **** 38. The 2nd and 3rd joints 9 and 26 are not fixed to a stanchion 6 in that case. The joint holddown member 35 is constituted by high rigidity ingredients, such as a metal or rigid resin.

[0079] Thus, spacing of the 2nd and 3rd joints 9 and 26 is kept constant, and if these are changed into the condition of not fixing to a stanchion 6, the vibration can be controlled even if the shake of the loading platform of a truck, the shake of an earthquake, etc. are added to goods conveyance storage equipment. When goods conveyance storage equipment is piled up especially up and down, vibration of the goods conveyance storage equipment located in the bottom can be suppressed effectively, and the stability can be raised. And it becomes possible to enlarge weight of the goods loaded into the goods conveyance storage equipment above the weight of the goods loaded into lower goods conveyance storage equipment. For this reason, especially an operator can pile up each

goods conveyance storage equipment up and down efficiently, without taking the light weight of a load into consideration.

[0080] When the 1st joint 8 shown in drawing 7 is attached in the longitudinal direction free [sliding] to a stanchion 6, even if it carries out the fixed coupling of all the 1st joint 8 and 2nd or 3rd joint 9 and 26 or 1st thru/or 3rd joint 8, 9, and 26 by the joint holddown member 35, the same effectiveness as the place mentioned above can be done so. Moreover, in the goods conveyance storage equipment shown in drawing 1, when the 2nd joint 9 is also attached to the longitudinal direction free [sliding] to a stanchion 6, even if it carries out the fixed coupling of the 1st joint 8 and 2nd joint 9 by the joint holddown member 35, the operation effectiveness mentioned above can be done so. What is necessary is just to remove the joint holddown member 35 from a joint before that, when folding up the stanchion units 32 and 32A.

[0081] As mentioned above, the joint holddown member 35 is in the condition which attached the stanchion 6 in the pallet 2, and makes the business which carries out the fixed coupling of at least two movable joints of each other to the longitudinal direction removable to one stanchion 6.

[0082] The joint holddown member 35 shown in drawing 13 consists of plates, and the joint holddown member 35 shown in $\underline{\text{drawing } 14}$ and $\underline{\text{drawing } 15}$ consists of ingredients which have the cross-section configuration of L typeface. Although any joint holddown member 35 can achieve the original function, since torsional rigidity is high, the joint holddown member 35 shown in drawing 14 and drawing 15 can heighten more the oscillating absorption effect of goods conveyance storage equipment. Reduction of cost can be attained, if it enables it to use the joint holddown member 35 of the same gestalt and communalization of the component is attained, in order to carry out the fixed coupling of the joint attached in four each struts 6, also when using the joint holddown member of which gestalt in that case. Although the joint of each strut 6 can be connected by the joint holddown member of the same gestalt since the joint holddown member 35 shown in drawing 13 consists of a plate Since the tongue-shaped pieces 18 and 18A for connecting the connection members 14 and 15 protrude on each joint, when using the joint holddown member 35 of L typeface shown in drawing 14 and drawing 15 It is necessary to adjust the relation between the screw-thread hole site of the joint holddown member 35, its number and these, and the location of tongue-shaped pieces 18 and 18A so that communalization of the component can be attained. Thus, two or more joint holddown members 35 which fix two or more joints attached in each of four stanchions 6 removable, respectively can aim at reduction of the cost by constituting the joint holddown member 35 so that all may be formed in the same gestalt.

[0083] Moreover, if a hole 37 is made to penetrate a stanchion 6 while forming the attaching part 36 of the typeface cross section of KO in the joint holddown member 35, forming a hole 37 here and carrying out fitting of the attaching part 36 to one joint 9, as shown in <u>drawing 16</u> and <u>drawing 17</u>, even if it removes **** 38, the joint holddown member 35 can keep held to a stanchion 6, and can prevent loss of the joint holddown member 35.

[0084] In the example shown in <u>drawing 18</u> and <u>drawing 19</u>, also when the notching 40 formed in the attaching part 36 of the joint holddown member 35 engages with a stanchion 6 and **** 38 is removed, the joint holddown member 35 can be held to a stanchion 6.

[0085] As mentioned above, the fault from which loss of the joint holddown member 35 can be prevented, and the joint holddown member 35 becomes obstructive at the time of the un-using it can also be prevented by attaching to the stanchion 6 so that it may not secede from the joint holddown member 35 to a stanchion 6.

[0086] By the way, as mentioned above, the goods conveyance storage equipment loading goods is accumulated up and down, and is carried, or although it can be kept, the goods conveyance storage equipment loading goods may be carried or kept independently. In such a case, the upper space of the goods conveyance storage equipment becomes useless.

[0087] Then, in the example of an operation gestalt shown in drawing 20 thru/or drawing 25, the top plate 41 with which goods conveyance storage equipment is laid removable on the stanchion 6 is provided. The configuration about this top plate is applicable to any example of an operation gestalt explained previously.

[0088] The engagement member 42 which engages with the above-mentioned bridge formation member 34 attached in the upper part of a stanchion 6 is formed in the bottom side, and any top plate 41 shown in <u>drawing 20 thru/or drawing 25</u> is constituted so that a top plate 41 may be laid in the upper part of four stanchions 6 through the bridge formation member 34. On the other hand, you may constitute so that a top plate 41 may be soon laid in the upper part of a stanchion 6. Moreover, it is desirable to establish a stop means by which it is not illustrating for positioning and locking a top plate 41 to a stanchion 6.

[0089] <u>Drawing 20</u> shows the situation when setting a top plate 41 on stanchion unit 32A, and <u>drawing 21</u> shows the situation when carrying the goods 43, such as a load, on the top plate 41. The top face of this top plate 41 is a flat field, can carry goods 43 by the stable state on this field, and can use the headroom of goods conveyance storage equipment effectively.

[0090] Moreover, the goods safety catch means which starts at that edge and changes from a wall 44 to the top plate 41 shown in drawing 22 is formed, and as shown in drawing 23, when the goods 43, such as a load, are carried on this top plate 41, it is prevented that those goods 43 fall caudad with the standup wall 44. Even if it forms the goods safety catch means which becomes depressed in the center of a top plate 41, and changes more and holds goods here, fall of the goods can be prevented. Thus, also when the top plate 41 had the safety catch means of the goods carried on it and goods conveyance storage equipment vibrates, the goods 43 on the top plate 41 can fall, or fault which is protruded from the top face of a top plate can be prevented, and goods 43 can be carried on a top plate 41 by the stable state.

[0091] Although an example of a connection means to connect stanchion 6 comrades is constituted so that the 1st and 2nd connection members 14 and 15 may be explained also later, the receipt hole 45 of the stanchion 6 removed from the pallet 2 and a large number which contain the connection members 14 and 15 which constitute the connection means or its connection means is formed in the top plate 41 shown in $\frac{\text{drawing }24}{\text{and }}$ and $\frac{\text{drawing }25}{\text{drawing }25}$. In the illustrated receipt hole 45, as shown in $\frac{\text{drawing }25}{\text{drawing }25}$, stanchion unit 32A can be contained. For example, when returning the goods conveyance storage equipment to the original location after conveying the goods conveyance storage equipment of a large number loading goods 1 to other locations from a certain location and taking down goods 1 to the transportation place, stanchion unit 32A can be removed from a pallet 2, and the pallet 2 can be returned in piles up and down. One goods conveyance storage equipment presupposes that this has been assembled, it inserts folded-up stanchion unit 32A in each receipt hole 45 formed in the top plate 41, respectively, hooks the 1st joint 8 on the edge of the receipt hole 45, and makes each strut unit 32A hang in that case, as shown in $\underline{\text{drawing }25}$. If it does in this way, much stanchion unit 32A can be summarized in a compact, and can be carried.

[0092] By the way, although the 1st and 2nd connection members 14 and 15 exist between the stanchions 6 which adjoin each other mutually when goods 1 are loaded into goods conveyance storage equipment so that drawing 12 may also show, the big clearance remains between a stanchion 6 and the connection members 14 and 15. For this reason, it lets an above-mentioned big clearance pass on the goods conveyance storage equipment which loaded goods 1, for example, and the goods 1 loaded into goods conveyance storage equipment when putting both other loads on the loading platform of a truck and carrying these, and a possibility that other loads may enter is in them.

[0093] Then, the goods conveyance storage equipment shown in drawing 26 thru/or drawing 31 has the safeguard which covers a part of clearance [at least] between two

stanchions which adjoin each other mutually and are located. The configuration of this safeguard is also applicable to any example of an operation gestalt explained previously. [0094] In the example shown in drawing 26, the above-mentioned safeguard consists of the bags or boxes 46 in which the lower part which consists of resin, the corrugated paper made of paper, etc., such as polyethylene, carried out opening, and covers and puts this box 46 from the goods conveyance storage equipment loading goods 1. By this, all the clearances between stanchions are intercepted from the outside, and an external load can enter the interior of goods conveyance storage equipment, or they can prevent the fault with which an external load touches the goods 1 loaded into goods conveyance storage equipment.

[0095] The above-mentioned safeguard is constituted from the example shown in drawing 27 by the stretch film 47 which consists of a self-adhesiveness film. From the outside of the stanchion 6 of goods conveyance storage equipment, that stanchion 6 coils around this stretch film 47, and it is pasted up on a stanchion 6 by that self-adhesiveness. Thus, a stretch film 47 can close a part or the whole of a clearance between stanchions.

[0096] That protection network 48 is attached to goods conveyance storage equipment by the above-mentioned safeguard's being constituted from the example shown in drawing 28 and drawing 29 by the protection network 48, putting this protection network 48 from the outside of the stanchion 6 of goods conveyance storage equipment, and hooking two or more hooks 49 prepared in that protection network 48 to the stop hole formed to the connection member 15. It can prevent that this also closes a part of clearance between stanchions, and other loads enter the interior by it.

[0097] Moreover, in the example shown in <u>drawing 30</u>, a safeguard changes from the protection network 50 which has a network also to a crowning, puts this from the outside of the stanchion of the stanchion unit set to the pallet 2, and protects the goods 1 of the interior.

by two or more guard arms 51. These guard arms 51 are connected with the 1st and 2nd connection members 14 and 15 rotatable by the ** pin 52. At the time of that un-using it, if actuation of the guard arm which attached and showed especially sign 51A among these guard arms 51 is explained, it puts on the connection member 14, it is united, and this guard arm 51A is contained, as a broken line shows to drawing 31. When stanchion unit 32A is set to a pallet 2, stored guard arm 51A is rotated around the ** pin 52, as an arrow head C shows, and the operating location shown as a continuous line is brought. And the tip of this guard arm 51A and the tip of the next guard arm 51 similarly

brought to the operating location are connected with stop means, such as the connection pin 53 or a bolt, and a nut. Other guard arms 51 are similarly brought to an operating location. It prevents that an external load etc. trespasses upon the interior of the goods conveyance storage equipment with which the guard arm 51 was located and goods 1 were held for these guard arms 51 between each struts 6 by this.

[0099] Moreover, as shown in <u>drawing 1</u> or <u>drawing 7</u>, this can be protected during conveyance of the goods 1 also by covering goods 1 the very thing loaded into goods conveyance storage equipment with covering 31. Although one flexible bag 33 which wraps goods 1 as wrap covering 31 for some goods [at least] 1 was shown in <u>drawing 1</u>, at least two bags which wrap goods 1 may constitute covering 31. <u>Drawing 32</u> shows the example which constituted covering 31 with two bags 33 and 33A. Thus, when delivering the goods 1 to the bottom of a user even if a contaminant and dust adhere to outside bag 33A so much with static electricity while carrying goods 1 with goods conveyance storage equipment or keeping it, if two bags are put on goods 1, a product with sufficient appearance without a contaminant or dust can be sent to the bottom of a user by removing upper bag 33A.

[0100] Moreover, some goods [at least] on a pallet 2 can be covered, and as covering with which the presenting M of the information about the goods 1 is made if needed, instead of a flexible bag, as shown in drawing 33, covering 31A which has a form corresponding to the gestalt of a product can also be used. This covering 31A consists of corrugated paper made of resin and paper etc., and the information about goods 1 is displayed also on this covering 31A. This covering 31A can be used repeatedly and can suppress generating of trash. In that case, if constituted possible [folding of covering 31A], after delivering a product to the bottom of a user, the covering 31A can be folded up and it can bring home efficiently.

[0101] As explained also in advance, by the way, each above-mentioned goods conveyance storage equipment The connection members 14 and 15 which connect stanchion [which is attached in a pallet 2 removable] 6 and two stanchions adjoin each other mutually 6 comrades, respectively Where a stanchion 6 is removed from a pallet 2, the foldable stanchion units 32 and 32A are constituted, the stanchion unit removed from the pallet 2 by this is kept to a small tooth space, or this can be carried comfortably. When folding up this stanchion unit, as a stanchion 6 is held by hand to drawing 34 as the chain line shows, a stanchion 6 is brought close and it is shown in drawing 35, it folds up, but if the clearance L between a stanchion 6 and the connection members 14 and 15 is too small at this time, the digiti manus grasping a stanchion 6 will be caught in this clearance.

[0102] Then, in the goods conveyance storage equipment shown in drawing 34 and drawing 35, when stanchion unit 32A is folded up, the stanchion, the joint, and the connection member are attached 15mm or more, respectively among the connection members 14 and 15 connected with the stanchion 6 and this stanchion 6 rotatable through the joint 8, so that the clearance L 20mm or more may be made preferably. Clearance L can be set as the above values by specifically enlarging the amount of protrusions of tongue-shaped piece 18A which protruded on each joint 8. Thus, by enlarging Clearance L, an operator can prevent the fault by which a finger is pinched. [0103] The configuration mentioned above is applicable also to the goods conveyance storage equipment shown in drawing 1 thru/or drawing 6 as it is. Moreover, in drawing 34 and stanchion unit 32A which $\frac{**35**(ed)}{}$, a crevice 54 is formed in the top face of the 1st joint 8 fixed to each strut 6, and it is constituted so that the engagement pin (not shown) which protruded on the rear face of the bridge formation member 34 shown in drawing 11 may fit into this crevice 54 removable. Thus, although stanchion unit 32A shown in drawing 34 and drawing 35 is somewhat different from stanchion unit 32A shown in $\underline{\text{drawing }7}$, there is no place which is different in the basic configuration.

[0104] Each above-mentioned goods conveyance storage equipment possesses a connection means to connect the two stanchions concerned, respectively, possible [adjustment of spacing between the pallet 2 with which goods 1 are laid, two or more stanchions 6 attached in this pallet 2 removable so that the goods 1 laid on this pallet 2 may be surrounded, and two stanchions 6 which adjoin each other mutually] so that it may be understood from the above explanation.

possible [adjustment of spacing between two stanchions 6 which goods conveyance storage equipment adjoins mutually the pallet 2 with which goods 1 are laid, and four stanchions 6 attached are in the condition which started almost perpendicularly to the goods installation side 5 of the pallet 2, and removable if shown more concretely, and are located] is provided. In the example shown in drawing 1 thru/or drawing 6, the 1st and 2nd connection members 14 and 15 and the 1st and 2nd joints 8 and 9 constitute the connection means, and the 1st and the 2nd connection member 14 and 15 and the 1st thru/or the 3rd joint 8, 9, and 26 constitute the connection means from an example shown in drawing after drawing 7.

[0106] Moreover, the connection means of the example shown in drawing 1 thru/or drawing 6 is constituted so that it may change at same rate, and it may interlock mutually and all spacing between two stanchions 6 which adjoin each other mutually and are located may adjust the spacing concerned. By this, the goods of various sizes

can be carried with the goods conveyance storage equipment of magnitude suitable for this, or this can be kept.

[0107] Moreover, the connection means shown in drawing after drawing 7 so that spacing between two stanchions 6 which adjoin each other mutually and are located in each of one side which counters one side and this of a pallet 2 may change at same rate. It is constituted so that spacing between two stanchions 6 attached in other each of two sides to which it interlocks mutually and the spacing concerned is adjusted and, which a pallet 2 counters mutually by adjoining each other mutually may change at same rate, it may interlock mutually and the spacing concerned may be adjusted. It interlocks mutually and the spacing concerned is adjusted so that a connection means may counter spacing and two stanchions between two stanchions which adjoin each other mutually and are located and spacing between two stanchions of the others which adjoin each other mutually and are located may change at same rate. This can raise the adjustment degree of freedom of spacing between stanchions.

[0108] Moreover, also in which the above-mentioned goods conveyance storage equipment, in the goods installation side 5, since the pallet 2 has the connection section by which the upper part of other goods conveyance storage equipments is connected with the opposite side removable, it can accumulate easily two or more goods conveyance storage equipments up and down.

[0109] Furthermore, in the goods conveyance storage equipment of each example mentioned above, if the joints 8 and 9 attached in this, or 8, 9 and 26 are attached disengageable, it is advantageous. [each strut 6, and] For example, by demounting the 2nd joint 9 to a stanchion 6 in the case of the goods conveyance storage equipment shown in drawing 1, fixing to it according to the possible **** 20 (drawing 4) as mentioned above, and removing the screw thread 20, as shown in drawing 36, it constitutes so that each strut 6 can be separated from the 1st and 2nd joints 8 and 9.

[0110] Thus, if constituted, when one component 6 of goods conveyance storage equipment, for example, one stanchion, will receive damage and these will be exchanged, the stanchion 6 can be removed from a joint and this can be easily exchanged for a new thing. Moreover, also when carrying out disposal of the goods conveyance storage equipment, each strut and a joint are disassembled and it becomes possible to classify and dispose of the each. Therefore, especially the thing constituted so that the connection member 14 and no less than 15 comrades can moreover be separated is desirable so that the 1st and 2nd connection members 14 and 15 can be separated from each joint.

[0111] Each configuration explained above is changed further, and this invention can

constitute it, and, moreover, can apply substantially components, such as various goods other than a copying machine, for example, electric appliances, an automobile, and its engine, an automatic vending machine, a printer, facsimile, furniture, a building material, etc. to the goods conveyance storage equipment of anythings.

[0112]

[Effect of the Invention] According to invention according to claim 1 to 18, since spacing between each struts can be adjusted, any goods of size can be carried efficiently or this can be kept.

[0113] Especially according to invention given in claims 4 and 6, the adjustment degree of freedom of spacing between stanchions can be raised.

[0114] According to invention according to claim 7, the 1st and 2nd connection members can be removed from a joint, and goods can be easily carried on a pallet, or this can be taken down.

[0115] According to invention according to claim 8 to 10, when outside **** is applied to goods conveyance storage equipment, it can prevent that the goods conveyance storage equipment vibrates violently.

[0116] Especially according to invention according to claim 9, the cost of a joint holddown member can be reduced.

[0117] Moreover, according to invention according to claim 10, loss of a joint holddown member can be prevented.

[0118] According to invention according to claim 11 to 13, the headroom of goods conveyance storage equipment can be used effectively.

[0119] Especially according to invention according to claim 12, it can prevent that the goods on a top plate fall.

[0120] Moreover, according to invention according to claim 13, the stanchion removed from the pallet can be collectively stored in a compact.

[0121] According to invention according to claim 14, the fault with which an external object touches the goods on a pallet can be controlled.

[0122] According to invention according to claim 15, goods conveyance storage equipment can be loaded in piles up and down certainly.

[0123] According to invention according to claim 16, exchange of the components of goods conveyance storage equipment and its disposal can be performed easily.

[0124] According to invention according to claim 17, it can miniaturize, and the stanchion unit demounted from the pallet can be stored or carried.

[0125] According to invention according to claim 18, when folding up a stanchion unit, an operator can prevent the fault by which a finger is pinched.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view showing an example of goods conveyance storage equipment.

[Drawing 2] It is the perspective view showing the situation when assembling the goods conveyance storage equipment shown in drawing 1, and accumulating this up and down.

[Drawing 3] It is the expansion perspective view of the connection member connected with the 1st joint shown in $\frac{drawing\ 1}{drawing\ 1}$, and this.

[Drawing 4] It is the decomposition perspective view having separated and shown the stanchion from the 2nd joint shown in $\frac{drawing 1}{dt}$.

[Drawing 5] It is the perspective view showing the condition of having folded up the stanchion shown in drawing 1.

[Drawing 6] It is the perspective view showing signs that accumulated the pallet shown in drawing 1 up and down, and it was stored.

[Drawing 7] Drawing 1 is the perspective view showing the example of an operation gestalt of different goods conveyance storage equipment.

[Drawing 8] It is the perspective view showing the condition of having folded up the stanchion shown in drawing 7.

[Drawing 9] It is the perspective view showing the situation when detaching and attaching a stanchion unit on a pallet.

[Drawing 10] It is the perspective view showing other situations when detaching and attaching a stanchion unit on a pallet.

[Drawing 11] It is the perspective view showing an example when putting an object on a pallet.

[Drawing 12] It is a perspective view when accumulating a goods conveyance storage equipment top up and down.

[Drawing 13] It is the perspective view showing the situation when connecting an up-and-down joint by the joint holddown member.

[Drawing 14] It is the perspective view showing other examples of a joint holddown member.

[Drawing 15] It is the perspective view showing signs that other joints are connected by the joint holddown member shown in drawing 14.

[Drawing 16] It is the perspective view showing other examples of a joint holddown member.

[Drawing 17] It is the perspective view showing signs that the joint was connected by the joint holddown member shown in drawing 16.

[Drawing 18] It is the perspective view showing the example of further others of a joint holddown member.

[Drawing 19] It is the perspective view showing the situation when connecting a joint by the joint holddown member shown in $\underline{\text{drawing 18}}$.

[Drawing 20] It is the perspective view showing the example which attached the top plate on the joint holddown member.

[Drawing 21] It is the perspective view showing the condition of having put the load on the top plate.

[Drawing 22] It is the perspective view showing other examples of a top plate.

[Drawing 23] It is the perspective view showing the situation when putting a load on the top plate shown in drawing 22.

[Drawing 24] It is the perspective view showing the example of further others of a top plate.

 $[\underline{\text{Drawing 25}}]$ It is the perspective view showing the situation when containing a stanchion unit in the top plate shown in $\underline{\text{drawing 24}}$.

[Drawing 26] It is the perspective view showing the situation at the time of a wrap for a stanchion unit with a box.

[Drawing 27] It is the perspective view showing the condition of having covered the stanchion unit with the stretch film.

[Drawing 28] It is the perspective view showing signs that the stanchion unit was covered in a protection network.

[Drawing 29] It is the partial enlarged drawing of drawing 28.

[Drawing 30] It is the perspective view showing other examples of a protection network.

[Drawing 31] It is the perspective view showing the goods conveyance storage equipment which prepared the guard arm.

[Drawing 32] It is the perspective view showing the example which constituted covering from a bag of a duplex.

[Drawing 33] It is the perspective view showing the example which constituted covering from a box.

[Drawing 34] It is the perspective view showing the situation when folding up a stanchion unit.

[Drawing 35] It is the perspective view showing the folded-up stanchion unit.
[Drawing 36] It is the perspective view showing the situation when separating the stanchion shown in drawing 1 from the 1st and 2nd joints.

[Description of Notations]

- 1 Goods
- 2 Pallet
- 5 Goods Installation Side
- 6 Stanchion
- 6A Stanchion
- 6B Stanchion
- 6C Stanchion
- 6D Stanchion
- 8 1st Joint
- 8A The 1st joint
- 8B The 1st joint
- 8C The 1st joint
- 8D The 1st joint
- 9 2nd Joint
- 9A The 2nd joint
- 9B The 2nd joint
- 9C The 2nd joint
- 9D The 2nd joint
- 14 1st Connection Member
- 14A The 1st connection member
- 14B The 1st connection member
- 14C The 1st connection member
- 14D The 1st connection member
- 15 2nd Connection Member
- 15A The 2nd connection member
- 15B The 2nd connection member
- 15C The 2nd connection member
- 15D The 2nd connection member
- 26 3rd Joint
- 26A The 3rd joint
- 26B The 3rd joint

- 26C The 3rd joint
- 26D The 3rd joint
- 30 Goods Conveyance Storage Equipment
- 30A Goods conveyance storage equipment
- 32 Stanchion Unit
- 32A Stanchion unit
- 35 Joint Holddown Member
- 41 Top Plate
- 45 Receipt Hole
- L Clearance